

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-10. (Canceled)

11. (Currently Amended) An RC oscillator circuit, comprising:

a current generator configured to generate a charge current;

[[an]]a first integrator having an input and an output, the input being connected to the current generator;

a comparator having a first input, a second input, and an output, the first input being connected to the output of the first integrator and the second input being configured to supply a reference threshold;

a clock pulse generator connected to the output of the comparator; and

a reference generator comprising a second integrator configured to integrate an output voltage from the first integrator,

wherein the reference generator is configured to generate the reference threshold based on the integrated output voltage and a supply voltage of the RC oscillator circuit, and

wherein the first integrator comprises a first capacitor and a second capacitor which are alternately charged and discharged.

12. (Currently Amended) An RC oscillator circuit, comprising:

a current generator configured to generate a charge current;

an integrator having an input and an output, the input being connected to the current generator, the integrator comprising at least one capacitor;

a comparator having a first input, a second input, and an output, the ~~[[a]]~~ first input being connected to the output of the integrator and the second input being configured to supply a reference threshold;

a clock pulse generator connected to the output of the comparator; and

a reference generator coupled to the integrator, the reference generator being configured to generate the reference threshold based on a supply voltage of the RC oscillator circuit, and a voltage at a node ~~above~~ connected to the capacitor.

13. (Currently Amended) The RC oscillator circuit of claim 11, wherein the first integrator further comprises a discharge device configured to discharge at least one of the first capacitor and the second capacitor.

14. (Currently Amended) The RC oscillator circuit of claim 11, wherein the reference generator comprises an integrating amplifier, the integrating amplifier having an input and an output, the input being coupled to the first integrator and the output being configured to

supply the reference threshold based on an integrated voltage at a node ~~above~~ connected to at least one of the first capacitor and the second capacitor relative to the supply voltage.

15. (Currently Amended) The RC oscillator circuit of claim 12, wherein the reference generator further comprises a differential amplifier configured to generate the reference threshold based on a difference between a voltage derived from the supply voltage and the voltage at the node ~~above~~ connected to the at least one of the first capacitor and the second capacitor.

16. (Currently Amended) ~~The RC oscillator circuit of claim 11,~~ An RC oscillator circuit, comprising:
a current generator configured to generate a charge current;
a first integrator having an input and an output, the input being connected to the current generator;
a comparator having a first input, a second input, and an output, the first input being connected to the output of the first integrator and the second input being configured to supply a reference threshold;
a clock pulse generator connected to the output of the comparator; and
a reference generator comprising a second integrator configured to integrate an output voltage from the first integrator,

wherein the reference generator is configured to generate the reference threshold based on the integrated output voltage and a supply voltage of the RC oscillator circuit,

wherein the first integrator comprises a first capacitor and a second capacitor which are alternately charged and discharged, and

wherein the current generator comprises a voltage divider having an input connected to a supply potential connection and an output connected to a voltage-to-current converter.

17. (Previously Presented) The RC oscillator circuit of claim 16, wherein the voltage-to-current converter comprises a resistor.

18. (Currently Amended) The RC oscillator circuit of claim 11, wherein the current generator is coupled to the first integrator by at least one current mirror.

19. (Previously Presented) The RC oscillator circuit of claim 12, where the integrator further comprises a discharge device configured to discharge the at least one capacitor.

20. (Currently Amended) The RC oscillator circuit of claim 12, wherein the reference generator comprises an integrating amplifier, the integrating amplifier having an input and an output, the input being coupled to the integrator and the output being configured to supply the reference threshold based on an integrated voltage at a node ~~above~~ connected to the at least one capacitor.

21. (Currently Amended) The RC oscillator circuit of claim 20, wherein the reference generator comprises a differential amplifier configured to generate the reference threshold based on a difference between a voltage derived from the supply voltage and the voltage at the node ~~above~~ connected to the at least one capacitor

22. (Previously Presented) The RC oscillator circuit according of claim 12, wherein the current generator comprises a voltage divider having input connected to a supply potential connection and an output connected to a voltage-to-current converter.

23. (Previously Presented) The RC oscillator circuit of claim 22, wherein the voltage-to-current converter comprises a resistor.

24. (Previously Presented) The RC oscillator circuit of claim 12, wherein the current generator is coupled to the integrator by at least one current mirror.

25. (New) The RC oscillator circuit of claim 16, wherein the first integrator further comprises a discharge device configured to discharge at least one of the first capacitor and the second capacitor.

26. (New) The RC oscillator circuit of claim 16, wherein the reference generator comprises an integrating amplifier, the integrating amplifier having an input and an output, the input being coupled to the first integrator and the output being configured to supply the reference threshold based on an integrated voltage at a node connected to at least one of the first capacitor and the second capacitor relative to ground.

27. (New) The RC oscillator circuit of claim 26, wherein the reference generator comprises a differential amplifier configured to generate the reference threshold based on a difference between a voltage derived from the supply voltage and the voltage at the node connected to the at least one of the first capacitor and the second capacitor

28. (New) The RC oscillator circuit of claim 16, wherein the current generator is coupled to the first integrator by at least one current mirror.

29. (New) The RC oscillator circuit of claim 11, further comprising a control bus connecting the clock pulse generator to respective control inputs of the first integrator and of the reference generator.

30. (New) The RC oscillator circuit of claim 12, further comprising a control bus connecting the clock pulse generator to respective control inputs of the integrator and of the reference generator.